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<u>CLAIMS</u>

We Claim:

- 1. A method for treating a human patient afflicted with cancer, comprising administering therapeutically effective amounts of temozolomide and pegylated interferon alpha to such a patient.
- 2. The method of claim 1, wherein the temozolomide is administered in repeated cycles, each cycle having a dosing period in which the temozolomide is administered daily at a dose of 50 to 400 mg/m²/day for 5 to 25 days, followed by a rest period of 5 to 14 days in which temozolomide is not administered.
- 3. The method of claim 2, wherein the pegylated interferon alpha is pegylated interferon alpha-2b, and is administered in an amount of from 1.0 to 9.0 micrograms per kilogram administered once a week.
- 4. The method of claim 3, wherein the pegylated interferon alpha-2b is administered in an amount of from 1.0 to 6.5 micrograms per kilogram administered once a week.
- 5. The method of claim 4, wherein the pegylated interferon alpha-2b is PEG₁₂₀₀₀-interferon alpha.
- 6. The method of claim 1, wherein the temozolomide is administered in repeated cycles, each cycle having a dosing period in which the temozolomide is administered daily at a dose of 100 to 200 mg/m²/day for 5 to 25 days, followed by a rest period of 5 to 14 days in which temozolomide is not administered.
- 7. The method of claim 6, wherein the temozolomide dosing period is one or three weeks, and the temozolomide rest period is one week.
- 8. The method of claim 7, wherein the pegylated interferon alpha is pegylated interferon alpha-2b, and is administered in an amount of from 1.0 to 9.0 micrograms per kilogram administered once a week.
- 9. The method of claim 8, wherein the pegylated interferon alpha-2b is PEG₁₂₀₀₀-interferon alpha.

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- 10. The method of claim 9, wherein the pegylated interferon alpha-2b is administered in an amount of from 1.0 to 6.5 micrograms per kilogram administered once a week.
- 11. The method of claim 2, wherein the pegylated interferon alpha is pegylated interferon alpha-2a, and is administered in an amount of from 50 to 500 micrograms once a week.
 - 12. The method of claim 11, wherein the pegylated interferon alpha-2a is administered in an amount of from 200 to 250 micrograms once a week.
 - 13. The method of claim 1, wherein the temozolomide is administered in repeated cycles, each cycle having a dosing period in which the temozolomide is administered daily at a dose of 100 to 200 mg/m²/day for 5 to 25 days, followed by a rest period of 5 to 14 days in which temozolomide is not administered, and wherein the pegylated interferon alpha is pegylated interferon alpha-2a, and the pegylated interferon alpha-2a is administered in an amount of from 50 to 500 micrograms once a week.
 - 14. The method of slaim 13, wherein the temozolomide dosing period is one or three weeks, and the temozolomide rest period is one week.
 - 15. The method of <u>claim 1</u>, wherein the temozolomide is administered daily for six weeks at a dose of 50 to 200 mg/m²/day, and wherein the pegylated interferon alpha is pegylated interferon alpha-2b, and the pegylated interferon alpha-2b is administered in an amount of from 1.0 to 9.0 micrograms per kilogram administered once a week.
 - 16. The method of claim 15, wherein the pegylated interferon alpha-2b is PEG₁₂₀₀₀-interferon alpha.
 - 17. The method of claim 16, wherein the pegylated interferon alpha-2b, is administered in an amount of from 1.0 to 6.5 micrograms per kilogram administered once a week.
 - 18. The method of claim 1, wherein the temozolomide is administered daily for six weeks at a dose of 50 to 200 mg/m²/day, and wherein the pegylated

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interferon alpha is pegylated interferon alpha-2a, and the pegylated interferon alpha-2a is administered in an amount of from 50 to 500 micrograms once a week.

- 19. The method of claim 1, wherein the temozolomide and pegylated interferon alpha are administered in repeated 28 day cycles, each 28 day cycle having a dosing period wherein the temozolomide is administered on days 1-7 and 15-21 of said cycle at a daily dose of 75 to 150 mg/m²/day and wherein the pegylated interferon alpha is adminstered on days 1, 8, 15 and 22 at a daily dosing of 1.5 to 6.0 micrograms per kg per day.
- 20. The method of claim 19, wherein the pegylated interferon alpha is pegylated interferon alpha-2b.
- 21. The method of claim 19, wherein the pegylated interferon alpha-2b is PEG₁₂₀₀₀-interferon alpha.
 - 22. A medical kit for treating a cancer patient is provided, comprising:
 - (a) a supply of temozolomide;
 - (b) a supply of pegylated interferon alpha; and
 - (c) printed instructions for administering temozolomide and pegylated interferon alpha to a cancer patient.